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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,649	11/24/2003	Christian Weis	2001P80072WOUS	1173

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EXAMINER	
HANSEN, COLBY M	
ART UNIT	**PAPER NUMBER**
3682	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,649	WEIS, CHRISTIAN	
	Examiner	Art Unit	
	Colby Hansen	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,9,15-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,9 and 15-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant's negative recitation of the intermediate member preventing the gear ring and hub from making direct contact must have basis in the original disclosure, mere absence of a positive recitation is not basis for an exclusion. Therefor any claim containing a negative limitation which does not have basis in the original disclosure is properly rejected under 35 USC 112, 1st paragraph as failing to comply with the written description requirement. MPEP 2173.05(i).

Claims 8, 9, 15-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to claim 21, the original specification has no clear antecedent basis for necessitating that the "the gear ring and hub are directly joined together by said elastic intermediate element".

With regard to claims 23 & 24, said claims limitations concerning the position of the hub, gear ring and intermediate member as well as the intermediate member being arranged to decouple have no clear antecedent basis within the original specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 9, and 15-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the metes and bounds are of the term "peak torque".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Baier (US Pat. 3,406,583).

Baier (US Pat. 3,406,583) discloses in figures 2-3, an electronically driven device (the "locking" device is an intended use recitation, therefor the actuator of Baier must only be capable of performing said function) for electronically engaging and disengaging an element of a motor vehicle, the device including actuating means having a motor (col. 2/line 21) and a worm gear 18, said motor arranged to drive said worm gear and generate kinetic energy resulting in application of a peak torque to said device, said device comprising a gear wheel comprising a gearing ring 20, a hub 26,30 and an elastic intermediate element 22, said gear wheel, gear ring 20 and hub 26,30 being directly and decouplingly joined together by said elastic intermediate element 26 and said gear wheel and hub 26,30 being further joined together via a material to material bond (frictional adhesion), said gear ring 20 and hub 26,30 each comprising circumferential teeth, said gear ring 20 teeth being arranged to engage said worm gear 18 such that force from said worm gear is imparted upon said gear ring 20, and a control disk 32 comprising circumferential gear arranged to interact with said hub gear such that rotation force may be exchanged between said control disk 32 and hub 26,30, said control disk mechanically linked to said element such that said peak torque is absorbed by said intermediate element 22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 9, 15-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz (US Pat. 6,445,081) in view of Baier (US Pat. 3,406,583)

Franz (US Pat. 6,445,081) discloses in figures 1 and 2, an apparatus comprising, an actuating device (fig. 1) having a motor 1 and a worm gear 3; a control disc 4 having a plurality of tracks 6,7 located on opposite side of the control disc 4; two arms (fig. 1 engaging 6,7), having extensions 11 extending into said plurality of tracks 6, 7 effecting a locking and releasing of a movable element 10,12(distal ends of said levers located away from ends thereof having the extensions).

Franz (US Pat. 6,445,081) does not disclose a wheel comprising a gear ring, a hub, and an elastic intermediate member located between said actuating device and said control disc.

Baier (US Pat. 3,406,583) teaches in figures 2-3, an electronically driven device for electronically engaging and disengaging an element of a motor vehicle, the device including actuating means having a motor (col. 2/line 21) and a worm gear 18, said motor arranged to drive said worm gear and generate kinetic energy resulting in application of a peak torque to said device, said device comprising a gear wheel comprising a gearing ring 20, a hub 26,30 and an elastic intermediate element 22, said gear wheel, gear ring 20 and hub 26,30 being directly and decouplingly joined together by said elastic intermediate element 26 and said gear wheel and hub 26,30 being further joined together via a material to material bond (frictional adhesion), said gear ring 20 and hub 26,30 each comprising circumferential teeth, said gear ring 20 teeth being arranged to engage said worm gear 18 such that force from said worm gear is imparted upon said gear ring 20, and a control disk 32 comprising circumferential gear arranged to interact with said hub gear such that rotation force may be exchanged between said control disk 32 and hub 26,30,

said control disk mechanically linked to said element such that said peak torque is absorbed by said intermediate element 22, for the purpose of driving a vehicle element while preventing motor damage or damage to the drive mechanisms of the arrangement, as suggested by Baier in col. 2/lines 25-32.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Franz in view of the teachings of Becker et al. to provide a wheel comprising a gear ring, a hub, and an elastic intermediate member arrangement located between an actuating device and a control disk, so as to prevent motor damage or damage to the drive mechanisms of the mechanical arrangement, as suggested by Baier in col. 2/lines 25-32.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franz in view of Baier as applied to claims 8, 9, 15-19, and 21-24, above and further in view of Gins berg. The reference combination set forth above discloses the basis apparatus but does not disclose first and second stop member.

However, Ginsberg teaches in figure 1 an apparatus comprising, inter alia, a control disc 40 having a first stop member 43 which engages a second stop member 38a, 38b so as to halt the movement of said control disc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Franz (US Pat. 6,445,081) in view of the teachings of Ginsberg to provide first and second stop members so as to limit the amount of rotation and provide halt positions of said control disc so as to provide rest positions when said

levers are actuated to desired positions; avoiding the continued locking and releasing with uninterrupted drive from said actuating device (col. 3/lines 20-35) as well as to provide an economically viable worm gear stop assembly that produces a high standard of quality, performance, precision, and protection, as suggested by Ginsberg (col. 1/lines 49-67).

Response to Arguments

Applicant's arguments filed 10/13/2005 have been fully considered but they are not persuasive.

Applicant traverses the 35 USC 112, 1st paragraph rejections of claim 23 for inclusion of a negative limitation, "the intermediate member preventing the gear ring and hub from making direct contact". Applicant argues that figure 3, shows possession of the claimed invention by describing the claimed invention with all of it limitations using such descriptive means as words, structure, figures, diagrams, and formulas that fully set forth the claimed invention. It is Examiner's contention that the structure as seen in figure 3 is insufficient to support applicant's claim of fully setting forth the claimed invention. At best it is silent to applicant's added limitations, as the internal structural make-up of the hub/intermediate elastic member/ring gear is unknown and unsupported by the original specification. Therefor the rejection is upheld.

Applicant traverses the 35 USC 112, 1st paragraph rejections of claims 23 and 24 as failing to comply with the written restriction requirement. Applicant argues that page 2, lines 14-30 provide antecedent basis for the new limitations, thereby overcoming the rejection. Examiner disagrees, as the cited passage says nothing about the coupling/decoupling abilities of the hub/elastic element/ring gear assembly. Nor does it explicitly state that the hub and ring gear

are directly connected by means of the elastic element or that the elastic element prevents the aforementioned parts from touching. Therefor the rejection is upheld.

With regard to the 35 USC 112, 2nd paragraph rejection of the indefiniteness of the term "peak torque", it is unclear what applicant means by the terminology. Is the peak torque a force unusually high when compared to the current state-of-the-art of analogous locks or is it an optimum force that prevents unusually high torque from being transmitted to the mechanism thereby protecting the mechanism from undue wear or some other manifestation?

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(571) 273-8300**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MEP. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MEP. 512). The following is an example of the format the certification might take:

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If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MEP. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (571) 272-7105. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley, can be reached on (571) 272-6917. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner

11/18/05

RICHARD W. RIDLEY
PRIMARY EXAMINER
SPE AU 3682